

Contents

NUMBER 1, FEBRUARY

R. Woodall: Empiricism and concept in successful mineral exploration	1
D. A. Foster, J. M. Murphy and A. J. W. Gleadow: Middle Tertiary hydrothermal activity and uplift of the northern Flinders Ranges, South Australia: Insights from apatite fission-track thermochronology	11
R. W. L. Kimber, N. M. Kennedy and A. R. Milnes: Amino acid racemization dating of a 140 000 year old tephra-loess-palaeosol sequence on the Mamaku Plateau near Rotorua, New Zealand	19
B. Eyre: Early Cambrian alluvial fan-deltas in the Georgina Basin, Australia	27
W. J. Ullman and K. D. Collerson: The Sr-isotope record of late Quaternary hydrologic changes around Lake Frome, South Australia	37
M. P. McClenaghan, D. B. Seymour and I. M. Villa: Lamprophyre dyke suites from western Tasmania, their radiometric dating and the age of thrust faulting in the Point Hibbs area	47
J. D. A. Clarke: Evolution of the Lefroy and Cowan palaeodrainage channels, Western Australia	55
K. R. Sharp: Discussion: A core through the Monaro basalt: Bega (BMR) No. 7. A reinterpretation and discussion	69
M. C. Brown, K. G. McQueen and G. Taylor: Reply to Discussion: A core through the Monaro basalt: Bega (BMR) No. 7. A reinterpretation and discussion	71
D. E. Leaman: Geological Note: The Tamar fracture system in Tasmania: Does it exist?	73

NUMBER 2, APRIL

D. C. Arne, P. W. Cromie, J. A. Webb and J. R. Richards: The genesis of Pb-Zn sulphide occurrences in the Lower Devonian Buchan Group, Victoria	75
B. K. Davis: Synchronous syntectonic granite emplacement in the South Palmer River region, Hodgkinson Province, Australia	91
D. Findlay: Boudinage control on the emplacement of lodes of the Kalgoorlie goldfield	105
R. J. Holcombe and T. A. Little: Blueschists of the New England Orogen: Structural development of the Rocksberg Greenstone and associated units near Mt Mee, southeastern Queensland	115
R. Klemd, A. Wülbbers, D. K. Hallbauer and J. M. Barton Jr: Evidence for the origin of hydrothermal alteration in granitoids after Witwatersrand Basin deposition, South Africa	131
J. A. C. Anderson and C. M. Gray: Geological affinities of the Glenelg River Complex, western Victoria	141
F. Pirajno: Mineral resources of anorogenic alkaline complexes in Namibia: A Review	157
D. E. Leaman: Discussion: Complex regional fault history of the Badger Head Region, northern Tasmania. C. G. Elliott, N. B. Woodward and D. R. Gray: Reply to Discussion	169
D. E. Leaman: Discussion: Repeated Palaeozoic thrusting and allochthoneity of Precambrian basement, northern Tasmania. N. B. Woodward, D. R. Gray and C. G. Elliott: Reply to Discussion	171
M. E. Barley, N. J. McNaughton, I. S. Williams and W. Compston: Geological Note: Age of Archaean volcanism and sulphide mineralization in the Whim Creek Belt, west Pilbara	175
A. Watchman: Geological Note: Radiocarbon dating fatty acids in Holocene siliceous rock surface accretions	179

NUMBER 3, JUNE

S. Jaireth: Transport of gold and silver in oxygen-saturated fluids and the formation of high-fineness gold in saprolitic supergene environments	181
J. P. Le Roux and B. G. Jones: Lithostratigraphy and depositional environment of the Permian Nowra Sandstone in the southwestern Sydney Basin, Australia	191

F. L. Sutherland, L. R. Raynor and R. E. Pogson: Spinel to garnet lherzolite transition in relation to high temperature palaeogeotherms, eastern Australia	205
J. Wilkie, G. Gibson and V. Wesson: Richter magnitudes and site corrections using vertical component seismograms	221
J. D. A. Clarke: Geomorphology of the Kambalda region, Western Australia	229
P. T. Harris: Comparison of tropical, carbonate and temperate, siliciclastic tidally dominated sedimentary deposits: Examples from the Australian continental shelf	241
P. J. Gibson, H. F. Shaw and B. Spiro: The nature and origin of sideritic ironstone bands in the Tertiary Lowmead and Duaringa Basins, Queensland	255
J. L. Everard and I. M. Villa: Argon geochronology of the Crown Hill Andesite, Mt Read Volcanics, Tasmania	265
E. E. Wohl, S. J. Fuertsch and V. R. Baker: Sedimentary records of late Holocene floods along the Fitzroy and Margaret Rivers, Western Australia	273
C. I. Mathison and J. R. De Laeter: Geological Note: Strontium isotope initial ratios in the Windimurra layered gabbroid complex, Western Australia: A test for Bushveld-type magma mixing	281
Corrigendum	285

NUMBER 4, AUGUST

C. L. Fergusson, R. A. Henderson and J. V. Wright: Facies in a Devonian–Carboniferous volcanic fore-arc succession, Campwyn Volcanics, Mackay district, central Queensland	287
E. C. Leitch, C. L. Fergusson, R. A. Henderson and V. J. Morand: Late Palaeozoic arc flank and fore-arc basin sequence of the New England Fold Belt in the Stanage Bay region, central Queensland	301
M. Hand, I. Scrimgeour, K. Stüwe, D. Arne and C. J. L. Wilson: Geological observations in high-grade mid-Proterozoic rocks from Else Platform, northern Prince Charles Mountains region, east Antarctica	311
B. Zhou and D. J. Whitford: Geochemistry of the Mt Wright Volcanics from the Wonominta Block, northwestern New South Wales	331
R. A. Glen, B. J. Drummond, B. R. Goleby, D. Palmer and K. D. Wake-Dyster: Structure of the Cobar Basin, New South Wales, based on seismic reflection profiling	341
M. K. Fuller, Y. Bone, V. A. Gostin and C. C. von der Borch: Holocene cool-water carbonate and terrigenous sediments from southern Spencer Gulf, South Australia	353
A. J. R. Kent: Geochronology and geochemistry of Palaeozoic intrusive rocks in the Rockvale region, southern New England Orogen, New South Wales	365
P. J. Williams: Geological Note: Diverse nature of hematization ('Red Rock Alteration') in the Cloncurry district, northwest Queensland	381
V. J. Morand: Geological Note: Calc-silicate lenses in the Early Palaeozoic mud-pile of the Lachlan Fold Belt	383
D. Findlay: Geological Note: Boudinage, a reinterpretation of the structural control on the mineralization at Broken Hill	387
A. F. Trendall: Discussion: The Tennant Creek porphyry revisited: A synsedimentary sill with peperite margins, Early Proterozoic, Northern Territory. E. H. Francis: Reply to Discussion. J. McPhie: Reply to Discussion	391

NUMBER 5, OCTOBER

I. McDougall, M. A. H. Maboko, P. A. Symonds, M. T. McCulloch, I. S. Williams and H. R. Kudrass: Dampier Ridge, Tasman Sea, as a stranded continental fragment	395
J. Nott: Long-term landscape evolution in the Darwin region and its implications for the origin of landsurfaces in the north of the Northern Territory	407
J. D. A. Clarke: Lake Lefroy, a palaeodrainage playa in Western Australia	417

R. Valenta: Deformation of host rocks and stratiform mineralization in the Hilton Mine area, Mt Isa	429
J. B. Jago, I. A. Dyson and C. G. Gatehouse: The nature of the sequence boundary between the Normanville and Kanmantoo Groups on Fleurieu Peninsula, South Australia	445
P. E. Wells and A. R. Chivas: Quaternary foraminiferal bio- and isotope stratigraphy of ODP Holes 122-760A and 122-762B, Exmouth and Wombat Plateaus, northwest Australia	455
Z. Zhu, J. F. Marshall and J. Chappell: Effects of differential tectonic uplift on Late Quaternary coral reef diagenesis, Huon Peninsula, Papua New Guinea	463
R. W. Corkery and F. E. M. Lilley: Towards an electrical conductivity model for Australia	475
S. A. Greenhalgh, D. Love, K. Malpas and R. McDougall: South Australian earthquakes, 1980-92	483
E. N. Bui and A. R. Milnes: Origin of aragonite in a continental saline seep, north Queensland	497
P. H. Woods: Likely recharge to permanent groundwater beneath future rehabilitated landforms at Ranger uranium mine, northern Australia	505
C. Perkins, M. C. Hinman and J. L. Walshe: Timing of mineralization and deformation, Peak Au mine, Cobar, New South Wales	509
Corrigendum	523

NUMBER 6, DECEMBER

M. T. Warne and R. C. Whatley: Palaeo-oceanographical significance of Miocene deep-sea Ostracoda from the Kingfish 8 well, Gippsland Basin, southeastern Australia	525
M. R. Walter, K. Grey, I. R. Williams and C. R. Calver: Stratigraphy of the Neoproterozoic to Early Palaeozoic Savory Basin, Western Australia, and correlation with the Amadeus and Officer Basins	533
P. W. Schmidt, C. Aubourg, P. G. Lennox and J. Roberts: Palaeomagnetism and tectonic rotation of the Hastings Terrane, eastern Australia	547
J. A. Madsen and I. D. Lindley: Large-scale structures on Gazelle Peninsula, New Britain: Implications for the evolution of the New Britain arc	561
E. C. Leitch, C. L. Fergusson, R. A. Henderson and V. J. Morand: Ophiolitic and metamorphic rocks in the Percy Isles and Shoalwater Bay region, New England Fold Belt, central Queensland	571
P. C. Augustinus, S. A. Short and E. A. Colhoun: Pleistocene stratigraphy of the Boco Plain, western Tasmania	581
Q. Li and B. McGowran: Miocene upwelling events: Neritic foraminiferal evidence from southern Australia	593
B. Zhou and K. J. Mills: Correlation between the Wonominta and the Broken Hill Blocks in western New South Wales: Evidence from Nd isotope studies of metasediments	605
D. M. Compston and I. McDougall: ^{40}Ar - ^{39}Ar and K-Ar age constraints on the Early Proterozoic Tennant Creek Block, northern Australia, and the age of its gold deposits	609
P. J. Tarabba: Geological Note: Authigenic Sr-Ba-Ca carbonate minerals in coals of the Hunter Valley, New South Wales	617
C. J. Simpson and C. J. Woodfull: Geological Note: New field evidence resolving the relationship between the Grampians Group and the Rocklands Rhyolite, western Victoria	621
Author Index	625
Subject Index	626